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FM 55-6

WAR DEPARTMENT FIELD MANUAL

**MILITARY
TRANSPORTATION
SERVICE**

IN THEATERS OF OPERATIONS

WAR DEPARTMENT • DECEMBER 1945

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CHAPTER 1

GENERAL

Section I. Scope and Purpose

1. SCOPE. This manual describes the mission, functions, policies, organization, and operation of the military transportation service in theaters of operations. It deals with the activities of Transportation Corps and other personnel assigned or attached to such a service, and to related organizations; with Transportation Corps special units assigned to oversea commands; and with Transportation Corps Tables of Organization and Equipment. For a description of transportation in the zone of interior see TM 55-205.

2. PURPOSE. This manual suggests patterns of organization for the military transportation service which are generally applicable to all theaters of operations. It is published as a guide for staff and command officers and for use in training.

Section II. Transportation Service

3. DEFINITION. The military transportation service in a theater of operations is the organization for the necessary coordination, control, and operation of such means of transportation as have been specified by the theater com-

mander to effect the nontactical transportation of personnel and supplies for the military forces of the theater, and civilian transportation requirements to the extent to which the theater commander has accepted responsibility for them. Such a service is under military control and supervision, although it may be manned and equipped in whole or in part by civilians and nonmilitary means of transport.

4. MISSION. The military transportation service of a theater of operations is responsible for the nontactical movement to, in, and from the theater of personnel and property in which the Army has a primary interest (except in those instances when responsibility for shipments to the theater has been established as belonging to another agency), and for the efficient utilization of transportation facilities assigned for operation.

5. GENERAL POLICIES. a. General policies affecting transportation in theaters of operations are set forth in Field Manuals of the 100 series, Field Service Regulations, and in other pertinent War Department publications. In accordance with such policies, the theater commander may establish a transportation service to effect the necessary coordination and control of all or part of the means of transportation not engaged in tactical movements or assigned to separate commands. In general, means of transportation assigned to the field armies, the theater air force,

and establishments in the communications zone are excepted. The transportation service normally operates the means of transportation placed under its control. In emergency situations the theater commander may direct it to operate or control any or all of that included in the above exceptions. The military transportation service is normally established under a theater chief of transportation who should be an officer of the Transportation Corps.

b. Specific functions pertaining to transportation in a theater of operations are determined by the theater chief of transportation for the theater commander. Such determination is usually affected by a number of factors which often vary greatly. Among the most important of these are the geographical location of the theater, major terrain features, climatic conditions, distances involved, existing transportation facilities, relations with our allies and the civilian population, the personnel available, and the enemy capabilities. These, and similar factors, also influence decisions as to the extent of centralization or decentralization required in transportation service operations, and this in turn determines to some extent the type of territorial and headquarters organization to be established. Functions, operation, and organization of a transportation service established on large land masses will, for instance, necessarily differ from those of a transportation service established in a theater consisting of large ocean areas with many widely separated insular commands.

6. FUNCTIONS. The primary function of the military transportation service is the movement of personnel and supplies on nontactical missions. It acts as a common-carrier service for the military forces of the theater and to meet civilian transportation requirements for which the theater commander has accepted responsibility. In performing this function, the military transportation service utilizes as operating agencies the Military Railway Service, the Highway Transport Service, the Inland Waterways Service, the Intratheater (or Coastwise) Shipping Service and exercises movement control over nontactical theater air transport and shipments of petroleum products by pipeline.

7. UNITS. Tables of Organization and Equipment, allotments of personnel, and special instructions, issued from time to time by the War Department, prescribe the details of organization of Transportation Corps units and installations. To meet changing situations, adjustments in strength and composition of Transportation Corps units are made by the theater chief of transportation. For further details of Transportation Corps units and installations, see chapter 5.

Section III. Theater Chief of Transportation

8. GENERAL. In a theater of operations, the chief of transportation is a Chief of Service and as Chief of Technical Service is under the commanding general of the communications zone or

Services of Supply if such command exists. He is also the special staff officer for transportation of the theater commander, concerned with policy and planning. In addition, he normally acts as traffic manager for the theater and as the chief operating officer of the military transportation service, in which capacity he is concerned with effecting the policies and plans relating to transportation. When, because of factors mentioned in paragraph 6, he does not function as the operating chief of the military transportation service as a whole, he usually retains operational control over those parts of the system which are, or may be, engaged in movements between major commands within the theater. In this case, the intracommand transportation system is usually operated by the transportation officer for the area. (See Sec. II, ch. 2.)

9. RESPONSIBILITIES. In general, and subject to the above considerations, the theater chief of transportation is responsible for planning and effecting the nontactical transportation of personnel and property in which the Army has primary interest. He is responsible for the procurement and issue of Transportation Corps equipment and supplies, and for determining, in coordination with the appropriate services, the suitability of all nontactical transportation equipment required in the theater. His specific duties include—

a. Taking appropriate staff action on all transportation matters.

b. Planning and coordinating with higher headquarters and with other services all transportation activities within the theater in which the Army has an interest.

c. Coordinating the assignment of Transportation Corps personnel, supplies, and equipment to various subordinate commands of the theater.

d. Coordinating and regulating the movement of personnel, supplies, and equipment between major echelons of command; between the zone of the interior and theater; and between the theater and other theaters or command areas.

e. Operating or exercising operational control over nontactical rail, highway, and inland waterways transportation and intratheater shipping.

f. Exercising movement control over nontactical intratheater air and pipeline transportation. Through or intertheater operations of the Air Transport Command and operational details are exempted from this control.

CHAPTER 2

ORGANIZATION

Section I. Headquarters

10. GENERAL. The transportation service organization includes the administrative office of the theater chief of transportation, area control offices, the Military Railway Service, the Highway Transport Service, the Inland Waterways Service, the Intratheater (or Coastwise) Shipping Service, and movement control of the theater air transport and pipeline service. (See ch. 4.)

11. STAFF REPRESENTATION. The theater chief of transportation is a member of the theater commander's special staff. In addition, as chief of a service he is on the staffs of the commanding general, communications zone, or Services of Supply, when such commands exist. If there is a combined general staff of a supreme allied headquarters in the theater, the chief of transportation may be a member thereon, in order to coordinate United States Army transportation matters with those of our allies. The theater chief of transportation also is normally represented in all major agencies, United States and allied, which have to do with important aspects of transportation affecting

the theater. Such representations may be reciprocal.

12. ASSISTANTS. The theater chief of transportation is normally assisted by one or more deputy chiefs of transportation, an executive officer, division chiefs in charge of staff and operating divisions, who are transportation officers.

13. OFFICE OF THEATER CHIEF OF TRANSPORTATION. The office of the theater chief of transportation may be organized in various ways to suit the over-all organization of the theater and local circumstances. In general, the less complex the organization, the more efficient it will be. Usually the pattern of organization will be based on a logical separation of divisions concerned with control and operation from those concerned with administration. These two types of divisions may be grouped under a deputy for operations with responsibility for such matters as planning, movements, control and statistics, rail, highway, port and water, inland waterways, air, and pipeline transportation, and a deputy for administration with responsibility for supply, personnel, publication, training and general administrative matters. Regardless of the type of organization in existence, it will usually be necessary to divide the divisions into branches and, sometimes, the branches into sections. The chiefs of the various transportation

agencies (for example, Military Railway Service, Highway Transport Service) usually serve as staff officers to the theater chief of transportation in addition to performing their functions as the heads of operating agencies. When such is not the case, the headquarters of operational services are in the field and the staff divisions of those services in the office of the theater chief of transportation act in an advisory and coordinating capacity.

14. FUNCTIONS. The various subdivisions of the office of the theater chief of transportation perform the staff and operating functions assigned to them by the theater chief of transportation. These normally include—

a. Coordination with the applicable general and special staff divisions in order to integrate the basic supply plan of the theater with transportation capabilities; the formulation of Transportation Corps plans for logistical support of all projected operations; the conduct and coordination of studies of ports, rail lines, road nets, inland waterways, air nets, and pipelines to establish their possible availability and capacity; the conduct and coordination of studies of personnel and services available and needed; the coordination of plans for new construction and reconstruction of transportation facilities with chiefs of applicable services.

b. The control of all movement which is the responsibility of the theater chief of transportation; coordination with the theater comman-

der's staff in the establishment of movement priorities; issuance of general movement instructions, when necessary, performing this function jointly with our allies to effect compliance with concerned agencies and personnel; assuring the most effective employment of all forms of available transportation by balancing the load in accordance with capabilities of each form of transportation; assignment of daily and weekly targets to operating field agencies to assure accomplishment of the movement plan; ascertaining destinations of troops, supplies, and equipment prior to arrival by use of advance information obtained from the zone of interior and theater headquarters; coordinating the discharge of vessels and disposition of cargo to prevent port and transportation congestion; maintaining liaison with United States and allied military forces and civilian transportation agencies; analyzing traffic dispatch advices and depot situation reports; compiling and disseminating progress reports and other statistical comparisons for operational use.

c. Directing and supervising all ports and marine transport operations under U. S. Army control in the theater, including interisland and coastwise shipping; maintaining liaison with United States and allied naval, and civilian marine agencies; compiling and disseminating marine shipping advices and other marine intelligence; determining operating requirements; supervising maintenance and repair of vessels and floating equipment. Acting in a staff

capacity on matters affecting the Intratheater (Coastwise) Shipping Service.

d. Planning for necessary railway equipment and directing the application of such available equipment to meet military requirements; arranging for rail shipments of troops and supplies in conformity with the general movement plan; acting in a staff capacity on matters affecting railways assigned to the Military Railway Service; compiling and disseminating information on the status of troop and supply movements by rail.

e. Determining equipment and personnel requirements for highway transport operations, establishing policies for the theater commander governing control of the movement of vehicles of all types, including civilian, organic and supply vehicles, on main routes, which have been designated by appropriate authority for use by the military transportation service; preparing plans for the efficient utilization of highway transportation; preparing and disseminating information on the status of troop and supply movements by highway transportation, acting in a staff capacity on matters affecting the Highway Transport Service.

f. Acting in a staff capacity for the Inland Waterways Service; coordinating inland waterways transportation with other forms of transportation; preparing plans and disseminating information on the movement of troops and supplies by inland waterways; maintaining liaison with pertinent military and civilian agen-

cies; estimating requirements and directing the application of equipment and personnel.

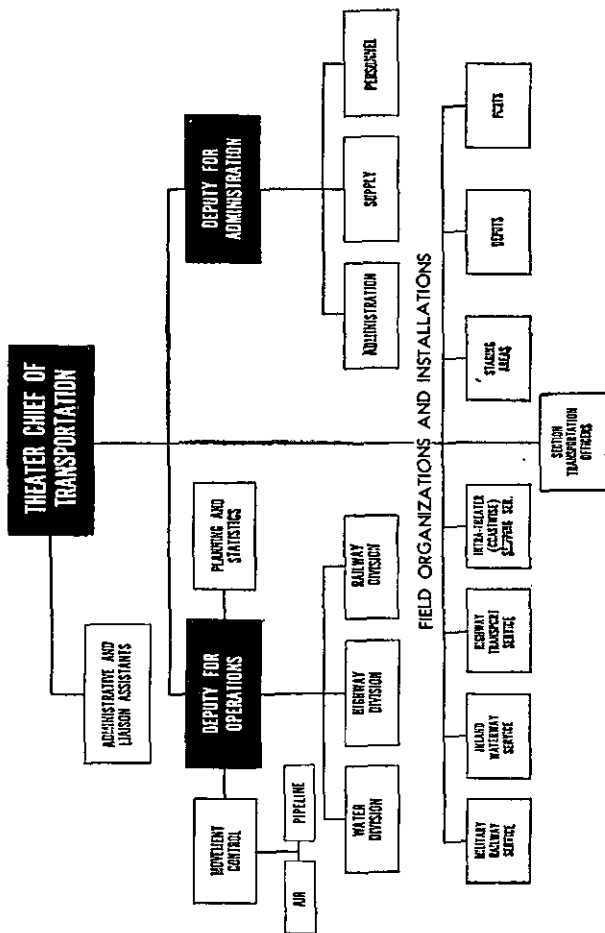
g. Preparing plans on the availability and efficient use of intratheater air-lifts; maintaining liaison with appropriate agencies in the use of air-lifts; coordinating the use of air-lifts with the general movement plan; exercising movement control of air-lifts for the theater chief of transportation and collecting and disseminating information on air-lifts for movement control purposes; supervising contracted air services.

h. Preparing plans on the availability and efficient use of pipeline transportation; coordinating with the appropriate authorities and agencies on the use of pipeline construction and transportation; exercising movement control of pipeline transportation and coordinating its use with other forms of transportation; compiling and disseminating information on pipeline transportation for movement control purposes.

i. Preparing plans for the utilization of native transport, including porterage, animal, water craft and cart; coordinating the use of native transport with other forms; supervising native contract transportation; preparing and disseminating information on native transport; maintaining liaison with civilian agencies concerned with native transport and labor.

j. Supervising Transportation Corps supply activities; anticipating and coordinating of requirements; processing contracts; expediting production items required; receiving and proc-

EXAMPLE OF AN OFFICE OF THE THEATER CHIEF OF TRANSPORTATION



essing requisitions and projects; supervising storage and initial issue of Transportation Corps equipment and supplies; maintaining records to show the status of supply at all times.

k. Performing all internal administrative functions in connection with the mission of the military transportation service, including the operation of message centers, the issuance of publications, and conduct of fiscal affairs.

l. Formulating training plans and policies for the Transportation Corps in the theater; establishing and supervising Transportation Corps military training programs; planning and supervising training programs for civilian workers employed by the Transportation Corps.

m. Formulating personnel policies; recommending allotments; making suballotments of Transportation Corps military personnel; receiving and processing all requests and requirements for Transportation Corps military personnel; procuring, classifying, assigning, promoting, and separating civilian personnel; maintaining personnel records.

Section II. Area Transportation Offices

15. GENERAL. The theater chief of transportation establishes area transportation offices in the major territorial subdivisions of the communications zone or Services of Supply when such commands exist. In general, such offices are established in base, intermediate, or ad-

vance sections and are headed by section transportation officers.

16. SECTION TRANSPORTATION OFFICERS.

The section transportation officer is normally a member of the section commander's staff. He advises the section commander on transportation matters. He supervises, coordinates, or directs the activities of the various agencies of the transportation service in the section, which are under the technical supervision of the theater chief of transportation. In general, a section transportation officer takes such action (except when specifically reserved to the theater chief of transportation) as is necessary or advisable to accomplish within the section the mission of the transportation services. The section transportation officer maintains a staff composed of administrative assistants and specialists in the various forms of transportation used within or traversing the area. Regulation of this transportation is usually affected through traffic regulation units.

17. TRAFFIC REGULATION UNITS. a. Traffic regulation units are established in the territorial subdivisions of the theater, and may also be attached to each of the transportation services for the purpose of effecting plans and policies directed by the office of the theater chief of transportation. In general, traffic regulation units are assigned to section transportation officers and are responsible for routing

of personnel and cargo, reporting progress of movement, arranging diversions and measures for clearing traffic congestion. One example of their function when attached to an operating agency of the transportation service is transmittal of orders to convoys passing along main lines of communication which have been designated for use by the military transport service, and conduct of such liaison as may be necessary with civilian authorities.

b. Traffic regulation units are activated from T/O & E 55-500. (See ch. 5.) This table provides for several different types of teams from which are furnished the necessary personnel to effect the coordination and movement control of water, highway, rail, air, pipeline, and inland waterways transportation as directed by higher authority. Each team is composed of one officer and four enlisted men and can be used in combination or multiple as the situation requires. The teams may be grouped under an appropriate headquarters to form units. When used at transportation intersections, off-loading points, and major control points, the members of such teams are sometimes referred to as RTO's (Rail, River, or Road Traffic Officer) or ATO's (Air Traffic Officer), WTO's (Water Traffic Officer), etc.

c. Traffic regulation units assigned to section transportation officers serve as clearing agencies for the acceptance and processing of movement requests based on competent order or authority. In addition to accepting and

processing movement requests, these units serve in a liaison capacity to the operating agencies, this relationship, in each case, being handled by a team trained in the transportation problems peculiar to the particular operating agency with which it deals.

d. Coordination with other operating agencies is established through the section transportation officers.

18. DECENTRALIZATION. While normally it is advisable for the theater chief of transportation to maintain centralized control over transportation facilities and operations (ch. 3), such control over intracommand transportation may be impractical in cases where the territorial divisions of the theater are widely separated (as in the case of insular commands in large ocean areas) and communications difficult. In such instances, operating responsibilities of the theater chief of transportation may be confined to technical supervision and theater coordination of movement between major echelons of command and from the zone of the interior, or other theaters. On the other hand, the responsibilities of the section transportation officers for operations within their echelons of command are similar to those outlined generally for the theater chief of transportation.

19. IN COMBAT ZONE. In the case of transportation in the combat zone, the theater chief of transportation coordinates with the appro-

priate officers on the staffs of the commanders of army groups, armies, or smaller commands which are operating independently. Such coordination is essential because of the interchange of traffic between the rear and forward areas. The combat zone transportation officers, preferably officers of the Transportation Corps, function under the army group and army commanders.

CHAPTER 3

OPERATIONS

Section I. General

20. BASIC PRINCIPLES a. Although the military transportation service must of necessity be organized and operated somewhat differently in each theater, basic principles and fundamentals of efficient transportation are applicable to all theaters. The complexities of modern warfare, as expressed in logistical terms, are such that a failure in any part of the military transportation system may result in a greater failure throughout the whole. There is a necessity for integration of each part with all other parts. This precludes decentralization to the point where either the various forms of transportation or the transportation networks of separate areas can be operated without regard for the requirements of the other forms or those of the entire system. The transportation service should serve the theater as a whole. Further, a high degree of flexibility is necessary in order that the transportation capabilities may be diverted, concentrated, or allocated as the strategic and tactical situations demand. The integration and flexibility required are best achieved through the establishment of unified control and continuity of operations.

b. The movement of troops, equipment, and supplies from the rear to the forward areas, and of evacuation and salvage from forward to rear areas, is usually, although not always, one of progression through successive, separate stages. This fact, coupled with the diverse operational and administrative needs of the forces in the theater, has resulted in a general policy of decentralization of operations to separate commands. Such a policy is normally expressed and effected through the division of a theater into various territorial areas. For details of territorial subdivisions in a theater of operations see FM 100-5, FM 100-10, and FM 100-15.

c. The necessity for decentralization of operations in the theater as a whole, and for unified control and continuity of operations in the military transportation service, are not inconsistent. It is important, however, that the transportation service develop its own pattern of organization, based on operational necessities, and not merely duplicate that existing in the territorial commands which it serves. This is true even where special factors in a theater (pars. 5 and 18) make a high degree of centralized control over transportation impractical. The basic organizational structures, like the operations performed, have essential differences, but they, too, should be mutually supporting.

Section II. Control

21. BASIS OF CONTROL. a. *Control* is the regulation of the use of the transport capacity and of its movement.

b. *Priorities of movement* are established by the theater commander in order that one movement may take precedence over another. The relationship of these priorities must be clearly defined and known to all agencies governed by or applying them. The establishment of priorities and their application requires an over-all, thoroughly integrated *movement plan*: a plan for personnel and supply movements in conformity with military requirements and available facilities. The movement plan is usually made by the theater G-4 in coordination with the tactical forces and technical services.

c. The type, amount, and quality of transportation is a limiting factor in personnel and supply movements. A comprehensive *transportation plan* which envisages utilization of total theater stocks of transportation personnel and equipment, and which is related to War Department ship allocations and theater supply requirements, is necessary. Formulation of this plan is usually the responsibility of the theater chief of transportation. Integration and continuity of operation are required to fully implement the movement of personnel and supplies throughout the theater in the order of priority which has been assigned. This, in turn, is dependent upon control.

22. METHODS OF CONTROL. a. Control of transportation in the theater of operations may be exercised by the establishment of—

(1) Priorities in the use of transportation, including priorities in the restoration of routes and the allocation of equipment.

(2) Movement control.

(3) A traffic circulation plan.

(4) Traffic control.

b. Establishment of *priorities in the use of transportation* enables the theater chief of transportation to regulate the use of the transport capacity and its movement. It also helps him to put into effect the priorities of movement and of matériel which have been established by the theater. Applying the priorities of movement is accomplished in large part at theater level through the allocation of space, that is, lift capacity, to the tactical commands and services, by the theater commander, who is advised by the theater chief of transportation. Normally, the tactical forces and chiefs of services establish their own priorities on actual equipment or matériel, within the limits of their space allotments.

c. *Movement control* consists of routing and scheduling personnel and supply movements so as to realize the priorities of movement established by the theater commander, and to utilize transportation facilities and equipment most effectively. Movement control aims at distributing the transportation load on the available arteries to the best advantage and at so coordi-

nating those movements with other movements as to prevent congestion. The application of movement control requires a *movement control plan*: a plan for the effective utilization of transportation equipment and facilities to be used in carrying out movements of personnel and supplies in accordance with the movement plan. Formulation of the movement control plan is normally a function of the theater chief of transportation.

d. Following the establishment of a movement plan and a movement control plan, it is necessary that there be drawn up for each area involved a *traffic circulation plan*: a plan detailing the use to be made of the transportation network in order to effect the movement control plan. In general, it is, therefore, a further break-down of the movement control plan with application to the specific geographic area under consideration. The traffic circulation plan for main supply routes is normally the responsibility of the theater chief of transportation, but it is important that the provost marshal and the chief engineer be consulted in its development.

e. *Traffic control* is the enforcement of traffic regulations and road, rail, air, and waterway discipline, including spot direction. It should not be confused with control of transportation or movement control. Effective traffic control requires a traffic control plan. The development of this plan and the establishment and application of traffic control measures are normally functions of the Navy or Coast Guard in the

case of off-shore water-borne traffic; the provost marshal in the case of highway traffic; the theater air force in the case of air traffic. Traffic on military railways and inland waterways is directed under the theater chief of transportation. The traffic control enforcement agencies operate to enforce the basic policy envisioned in the movement control and traffic circulation plans.

23. UNIFIED CONTROL. Control of all theater transportation should be unified in order that the services performed by different agencies may be integrated into one flexible system. To that end, the theater commander's authority is normally exercised by the theater chief of transportation in applying priorities through the designation of transportation equipment for a movement, and establishing and applying the principles of movement control. Further, the theater commander normally authorizes the theater chief of transportation to conduct direct liaison where necessary with any agencies affecting the fulfillment of the transportation mission. The detailed procedures whereby unity of control is applied may vary considerably according to the organization and operational requirements of the theater. In a continental type of operation the theater chief of transportation will usually exercise direct operational control over the service. In large ocean areas he may exercise such control only over through transportation or intercommand and intertheater transportation, control of

intra-command transportation being a function reserved to the section transportation officer under the section commander. Policy for the unified control of transportation is established and issued by the theater commander through command channels. In general, one agency, the office of the theater chief of transportation, is made responsible for achieving unified control of transportation, and is given commensurate authority to regulate the use of all means of transportation.

24. SIGNAL COMMUNICATIONS. a. Control of transportation, either in its broader aspects or in detailed operations, cannot be effected without adequate signal communication between various staff divisions, commands, and agencies. The signal communication system utilized by the transportation service must be as extensive and as flexible as the operations of the service itself. It must be prepared to cope with every emergency that is likely to develop.

b. It is the responsibility of the theater chief of transportation, in coordination with the chief signal officer of the theater, to develop and apply plans for the establishment and proper use of telephone, telegraph, and radio communication in all parts of the transportation service and to supplement such communication with messengers and other types of message transmittal when necessary. Failure to provide permanent and temporary, stationary and mobile signal communication facilities will result in loss of

control over the transport system and this, in turn, will result in failure to meet the needs of the theater.

c. It is the responsibility of the Signal Corps to construct and maintain such wire circuits as are necessary for train dispatching and for the administration of military railways, except, if all circuits along a route are turned over to the administration of military railways the same will be maintained and operated by the Transportation Corps.

Section III. Cooperation and Coordination

25. COOPERATION. a. Cooperation with other military forces, United States and allied, and with civilian agencies, is an important factor in the development of a transportation service in the theaters of operations. The degree to which this cooperation is needed varies according to local circumstances. In general, however, the greater the degree of cooperation, the better will be the transportation service.

b. In the theater, the type and degree of cooperation to be sought is determined by the highest staff echelons. But this determination can have but little effect unless the true meaning of cooperation and the methods whereby it is to be achieved are understood at every level and made part of the advance plan.

c. Junior officers and noncommissioned personnel assigned to duties which require the

development of cooperation, should make an immediate and careful study of the requirements, limiting factors, objectives, and available means affecting their assignments. They should, in other words, study not only all aspects of their own assignment, but those of the functions being performed by the persons or organizations with whom they are expected to cooperate, and in particular those of their opposite numbers in parallel organizations of our allies. On this basis, cooperation in its true meaning of collective action for mutual benefit becomes possible, and the intention of higher authority can be accomplished.

26. COORDINATION. a. The coordination required in the operation of the military transportation service of a theater is achieved as the result of planning, and cooperation between the organizations concerned. Such coordination in the theaters is necessary in order to develop the maximum and efficient usage of the various forms of transportation, and the most effective functioning of the service as a whole in relation to the necessary transportation requirements of the theater.

b. Among the specific objectives to be attained are prevention of highway, rail, port, inland waterways, and depot congestion, and the efficient tabulation of inventories of military and local transport.

The continued knowledge of available means of transport through such inventories is essential.

The effective employment of each form of transport, and the establishment of movement control and traffic direction are the principal methods whereby coordination of transportation is accomplished.

27. LIAISON. When necessary for the purpose of developing efficient cooperation and coordination on matters affecting transportation, liaison on the staff planning level is established between United States and allied military forces, and between United States forces and friendly civilian agencies, by the theater chief of transportation, under the direction of the theater commander; similar liaison at various operating levels is usually established under the immediate direction of the theater chief of transportation.

Section IV. Planning

28. GENERAL PLAN. a. The basic transportation plan of the theater (par. 21) should be the simplest one that will fill the requirements. It must, however, take into account the most extreme situation possible and provide for all contingencies. A complete understanding as to available forms of transportation, capacity and efficient schedule applicable to each, available transportation network and capacity of each route, what is to be moved, how it is to be moved, when it must be moved, from where and to where it is to be moved, and the area policies which would affect the plan, is needed. Es-

sential considerations in development of the plan for efficient utilization of available transportation facilities are flexibility, simplicity, minimum restrictions, alternate plans, necessary communications, security and secrecy, timely issuance of order, and provision for future operations.

b. Railroads, air transport, highway transport, pipeline, inland waterways, ocean shipping, and native transport all have their own characteristics. It is blending the efficiency and characteristics of each available form of transportation with theater requirements that gives greatest support to the theater campaign. This is a major function of the theater chief of transportation. In fulfilling this function he must work closely with the theater staff, the supply services, and other operating agencies. Proper advance planning will, for instance, require the closest coordination with the chief engineer of the theater in developing the type and amount of construction required for new bases, the type and amount of reconstruction necessary, and the type of transport to be recommended in the support of a particular operation. Sound conclusions can only be reached after the most careful consideration of both the engineering and transportation implications.

29. AREA PLANS. a. The over-all plan will need to be broken down into a detailed plan for each area. Situations will vary from one in which density of troop concentration is low, the

transportation network ample, and danger of interruption is small, to the opposite extreme. Usually, massing of troops, lack of a good railroad and road network, together with danger of their damage by hostile action make it difficult to maintain supply and troop movements.

b. The type of service to be performed will include line of communication hauling, port clearance, and static hauling within an area, each type having its own peculiar problems. The detailed plans are normally the responsibility of the area transportation officer who must coordinate them with the requirements of the area commander and with the general transportation plan for the theater.

Section V. Utilization of Civilian Transportation

30. GENERAL. Except in the most primitive areas, the basis of the military transportation service in theaters of operations is the existing transportation network and its facilities, expanded as may be required to meet the total traffic load. Available civilian personnel and some prisoners of war may also be utilized for the operation and maintenance of transport which is organized into the military transportation service.

31. INTEGRATION. Utilization of civilian transportation for military purposes requires that it be completely integrated with those forms of transportation that are purely military in

character. All transportation in the theater must be organized into one system, each part supplementing the other, and all directed to meeting the theater requirements. Very often it will be found that civilian forms of transportation in territory incorporated into a theater were designed and developed to compete with other forms, rather than to supplement them. It is seldom that the existing transportation facilities follow an economic pattern which corresponds to the tactical plan. In addition, the character of military movements involves large and concentrated numbers of men, and tremendous quantities of cumbersome and heavy equipment and matériel, for which the transportation facilities were not designed, and to which they are not readily adaptable. The integration of such transportation into one complete whole will, therefore, require improvisation, adaptation, and great flexibility of organization.

32. FACTORS. Before efficient utilization of civilian transportation in theaters of operations can be effected, several factors must be considered in the advance plan. Utilization of civilian transportation will be conditioned by—

- a. Adequate control of inventory and use of the means of transport.
- b. The character of the transportation network and equipment.
- c. The extent and condition of the network and facilities.
- d. Repair and maintenance facilities.

e. Relations with the civilian government and population.

f. Minimum transportation needs of the civilian population.

g. Security of military installations, equipment, and information.

h. The needs of our allies.

33. CONTRACT TRANSPORT. Wherever feasible, the military transportation service will normally be supplemented by a civilian transport service contracted for by the military forces. Such a service usually consists of civilian labor and facilities operated under civilian management, and controlled by the theater chief of transportation, or of military equipment operated by a civilian organization under such control.

Section VI. Evacuation—Security

34. CIVILIAN EVACUATION. Movement of civilian traffic in the theater of operations cannot be ignored. Any mass evacuation of the civilian population from the combat zone, unless properly controlled, may result in a complete stoppage of all military traffic to the severe detriment of military operations. Interference of evacuee movements with military traffic can be avoided or minimized by requiring that evacuation take place prior to or during a lull in military movements, by military control of all railroad operations, by requiring that evacuees

use roads or trails carrying little or no military traffic, by diverting evacuee traffic away from the areas most important for military operations, by using closely controlled evacuee convoys, and by forcing evacuee traffic to move to the roadsides or to designated areas pending completion of military movements. Civilian evacuation in nontactical areas is conducted by the provost marshal with the theater chief of transportation exercising movement control.

35. PRISONERS OF WAR EVACUATION. a. The theater chief of transportation is responsible for the transportation of prisoners of war throughout the communications zone. The provost marshal furnishes the theater chief of transportation with a report as requested, stating the number and location of prisoners of war for whom space is desired for evacuation. The number is normally broken down into general officers, officers, and enlisted personnel, indicating the number of females.

b. Upon receipt of space request, the area transportation officer concerned will notify the provost marshal when and where shipping will be available and will coordinate movement from inclosure to port.

36. EVACUATION OF SICK AND WOUNDED. a. Impetus of medical action is from the rear. Rear units evacuate forward units; ambulances are substituted for litters at forward limit of

traffic; hospital trains are substituted for ambulances at forward limit of rail traffic.

b. Evacuation from the combat zone to the communication zone and ports is under the theater chief of transportation. The chief surgeon of the theater coordinates with the theater chief of transportation in the general plan for evacuation and the theater chief of transportation is charged with transporting hospital patients and attendants; transporting of patients' baggage and the issuance of instructions concerning the proper marking thereof.

37. SECURITY. a. All orders regarding forward movement of troops and supplies are SECRET and particulars are communicated by commanding officers only to those whose duties require such information. All Transportation Corps officers must familiarize themselves with the necessary security measures issued by the proper authority and are responsible for the enforcement thereof.

b. The security of all supplies is a function of command. The protection of government property against all normal hazards rests squarely upon the shoulders of all officers and enlisted men of the Army. To achieve this, full cooperation is established between all concerned with the security of supplies. To prevent avoidable loss of United States property, certain theater standards must be maintained and requirements met in order to provide continuous security of such property while await-

ing loading, when loaded, while in transit, and until delivery to the ultimate consumer has been made. Doors, trucks, railroad cars, and hatches on barges and ships must be adequately fastened. Adequate containers, proper packing, and proper documentation must be provided. The proper guarding of installations and facilities, such as bridges, tunnels, overpasses, sidings, loading and unloading points, railway lines of communication, ports, depots, motor pools, airfields, and pipelines must be assured.

c. In general, responsibility for security is divided among section commanders, port and depot commanders, consignees of supplies, and the operating agencies which transport personnel and matériel. Such responsibilities are usually defined in theater regulations and in instructions issued by the theater chief of transportation.

38. DESTRUCTION OF MATÉRIEL. a. The decision for the destruction of property and matériel rests with the Army or theater commander. However, it is the responsibility of the unit commander to prepare a plan for the destruction and thoroughly train his personnel in its execution in order to insure its success when such an action becomes necessary.

b. The approved method of destruction of each item of matériel is published in the pertinent Field Manual or Technical Manual. This method should be used whenever possible in

order to obtain uniform results throughout the Army.

Section VII. Amphibious Operations

39. AMPHIBIOUS OPERATIONS. a. In a theater of operations, joint action of the ground, sea, and air forces involving landings on hostile shores, exemplifies the need for continuity and unified control of transportation. In the main, the responsibilities of the transportation service are limited to coordination, until such time as the landing beaches have been removed from the chain of supply and are replaced by captured or constructed ports. After the assault phase of the landing operations, however, the movement of supporting personnel and of supplies may give rise to many special problems connected with such matters as the rapid and orderly unloading of ships and craft, the direction of waterborne traffic between ships and shore, the prevention of congestion on beaches, the establishment of dumps, and the movement inland to forward areas. By the very nature of amphibious operations, such problems, if not avoided or solved, will seriously and adversely affect the success of the expedition.

b. The theater chief of transportation contributes to the avoidance or solution of these problems prior to embarkation of the task force by—

(1) Establishing liaison on pertinent transportation matters with the task force commander, the commanding officers of the land, sea, and air forces of the expedition, the transportation officer of the landing forces, the shore party commander, and the invasion beachmaster.

(2) Proper advance planning to include such matters as the calling forward of ships in the order of priority desired, the loading of personnel and supplies in accordance with the wishes of the landing force commander, the preparation of adequate documentation, and means and procedures for the transfer of port and beach operations and cargo handling from one service to another following the assault phase.

(3) Allocating necessary transportation equipment to the expedition.

(4) Attaching, when required, properly trained and equipped ship and shore group Transportation Corps units, such as port (stevedore) companies, amphibian truck companies, major or medium ports (oversea), and other necessary personnel, to the landing forces.

(5) Assigning, when required, properly trained ships' transportation officers to the vessels of the expedition.

(6) Exercising movement control over personnel and equipment into and out of concentration areas, assembly areas, and transit areas, in order to effect the mounting of the opera-

tion in accordance with the desires of the task force commander.

(7) Assisting in the correct processing of troops, who are to be engaged in the operation, and of their equipment, at staging areas within the theater when such areas are under the control of the theater chief of transportation.

(8) Assuring the correct loading of troops and supplies at the ports of embarkation within the theater, in accordance with the plans made in conjunction with the landing force commander, and subject to the stability requirements of the naval commander, when such ports are under the control of the theater chief of transportation.

c. Subsequent to the assault phase of the operations, the theater chief of transportation maintains liaison with the transportation officer of the landing force commander on matters relating to the movement of transports and supply ships employed in building up the strength of the land forces.

d. For details of landing operations on hostile shores see FM 31-5.

CHAPTER 4

FORMS AND METHODS OF TRANSPORTATION

Section I. General

40. FORMS. The military transportation service in theaters of operation may consist of one or more of six forms of transport: rail, highway, water, air pipeline, and native, with their component and auxiliary parts, such as supply, maintenance, repair, and traffic regulation. Components of the organization for the regulation and/or operation of these forms of transportation are found in Transportation Corps Tables of Organization and Equipment (ch. 5), with units in support, attached or assigned from other services such as the Chemical Warfare Service, Military Police, Quartermaster Corps, Corps of Engineers, Signal Corps, and Ordnance Department, when necessary. The transportation services will also normally utilize civilian transportation facilities and labor. Within a limited meaning of the term, the transportation service may be considered as a common carrier; that is, it operates carrier services which are for the common usage of many military installations and organizations, and which meet the civilian transportation requirements of the theater to the extent to which the

theater commander has accepted responsibility for them.

41. OTHER UNITS. It should be emphasized that despite the high degree of technical ability contained in Transportation Corps organizations and their adaptability to different types of installations and operations, no single such organization or any combination of them can operate independently of other military service organizations. Usually, it will be necessary for units of other services to act in support of the transportation service, or to be attached or assigned to it. Thus, for instance, the Highway Transport Service usually requires the services of engineer, ordnance, signal, quartermaster, medical, and military police units for its complete functioning. The Military Railway Service may need similar services and the same may be true of the Inland Waterways Service and Intratheater (or Coastwise) Shipping Service.

Section II. Rail Transportation

42. MILITARY RAILWAY SERVICE (MRS). a. Military railways within a theater of operations are those under military operation or control. They include railways operated under military supervision, by civilians, as well as those operated by military personnel. Military railways are assigned to the Military Railway Service of the

Transportation Corps. For a detailed description of military railways see FM 55-50.

b. The Corps of Engineers is responsible for construction, rehabilitation, and maintenance of railways, except when these functions are specifically assigned to another service. Normally, minor repairs and maintenance of ways are performed by the Military Railway Service.

c. The Military Railway Service includes the Headquarters, Military Railway Service, one or more grand division headquarters, the necessary number of operating and shop battalions or companies, and such additional auxiliary services as are needed. For railways requiring only one grand division headquarters, this headquarters functions as Headquarters, Military Railway Service. Where the extent of operations requires two or more Headquarters, MRS, these may be a General Headquarters, Military Railway Service, headed by a director general. The organization of the MRS may be augmented by units organized from components of the Transportation Corps service organization (T/O & E 55-500), or in the case of minor railway operations, the entire railway organization may be organized under this table. At railway centers more or less complete station services may be required.

43. CHARACTERISTICS. Utilization of railroad facilities to the fullest extent should be the basic principle of the overland transportation

plan. Railroads are characterized by their great capacities and effective control of movements. For shipments through the communications zone in continental type operations, railroads are, with few exceptions, the most efficient means of overland transportation. Loading capacity and possible schedules of trains are determined by the manager, or director general, Military Railway Service.

Section III. Highway Transportation

44. HIGHWAY TRANSPORT SERVICE (HTS). a.

The Highway Transport Service is organized under the theater chief of transportation. This service includes the headquarters of the Highway Transport Service and the required number of headquarters and headquarters company organizations (T/O & E 55-402T). No Table of Organization is presently available for a theater or communications zone highway transport organization comparable to the Headquarters and Headquarters Company, Military Railway Service, organization. But the Highway Transport Service organization (T/O & E 55-402T), expanded or reduced to the size necessary to accomplish the mission, will provide a practical headquarters organization.

b. Headquarters and Headquarters Company, Highway Transport Service (T/O & E 55-402T) provides the administrative, planning, and supervisory personnel for coordination, direction, and operational control of a Highway Transport Ser-

vice, consisting of attached or assigned operating, maintenance, signal, and military police units in a theater of operations or command and usually involving operation of 576 to 2,880 trucks.

c. The above organizations are augmented by units organized from components of the Transportation Corps service organization (T/O & E 55-500). At the larger highway transport centers, more or less complete station services may be required.

45. CHARACTERISTICS. Highway transportation in the theaters of operations consists of either or both military and civilian motor vehicles organized, regulated, and operated over highways which are under military control. Highway transportation is characterized by its great flexibility and adaptability to changing tactical situations. The Highway Transport Service of the Transportation Corps is the organization which operates highway transportation.

46. OPERATIONS. a. In highway transportation, maintenance, improvement, and extension of roads, are intimately connected with the plan of transportation and movement control. A given road has a certain capacity to sustain traffic. If subjected to heavier traffic, it will deteriorate rapidly with the consequent heavy maintenance and eventual break-down. A good but narrow road, capable of sustaining one lane of heavy traffic indefinitely, may break down in a

short time if subjected to heavy traffic in both directions, since vehicles must travel in part on the shoulder of the road. On the other hand, improvement or extension of a short stretch of road may permit adoption of a greatly improved plan. On certain lines of communication operated by a Highway Transport Service, it may be necessary for the operating agency to have attached engineer units to direct the maintenance of the highway.

b. In formulating a plan of traffic circulation, careful consideration should be given to the recommendation of the unit engineer who, in order to carry out his functions, must make a thorough reconnaissance of the transportation network, including condition and capacity of roads and all bridges, location of critical points and means, for quickly bypassing points most subject to traffic interruption. Supply routes will be designated to indicate the priority of maintenance required. Military police normally participate in such reconnaissance.

c. As density of traffic increases and the number of restrictions required become greater, animal-drawn traffic, because its presence greatly hinders motor traffic, may have to be prohibited from the main roads. One-way traffic may develop greater capacity when there is need for particularly heavy traffic, provided a satisfactory return route is available. It may be necessary to provide that on a certain stretch of road where a separate return route is not available traffic proceed in one direction during certain

hours and in the opposite direction at other hours. Orders for traffic diversions on roads assigned to the Highway Transport Service for operations are normally made by the Highway Transport Service. These orders are normally disseminated by the Traffic Regulation Units assigned to the Highway Transport Service. Enforcement of these orders is normally a function of the Military Police.

d. When heavy troop and motorized unit movements over roads are under way, it is essential that vehicles engaged in supply and evacuation move in convoy, with dispatching rigidly controlled from a central agency for the area and movements controlled and coordinated through the traffic control points. Experience has proved that traffic is facilitated if movements are by march units made up of from 4 to 25 vehicles dispatched with intervals of time between them adjusted to provide for the greatest freedom possible for movement of casual traffic, freight convoys of high priority, expansion and contraction of the column, and delays such as are due to accidents and air attack.

e. Highways which have been designated for use by the military transportation service should be numbered, route signs posted, and other traffic control devices, which will aid in direction and control of traffic, erected. Maps showing the various routes, road junctions, and installations as an aid to orientation, should be provided to all traffic regulation and traffic control personnel and to all others who should possess

this information. Use should be made to the extent feasible of special lights on vehicles and fluorescent, reflectorized, or dimly lighted signs at road junctions, bridge approaches, and other points.

f. The construction, maintenance, and numbering of highways, the placing of signs and other traffic control devices, and production and distribution of maps are normally functions of the Corps of Engineers, unless assigned to other services.

g. Coordination of traffic movements between points in each of the various areas of the communications zone and points within reach of using units in the combat zone should be effected through the agency responsible for traffic movement in each of the areas successively traversed. Control of movements in accordance with transportation and movement control plans and daily march graphs prepared by the responsible area agency are effected through personnel of traffic regulation units stationed at control points. Control points must be connected by telephone, telegraph, or by radio communication, and maintain daily messenger service with the central movement control headquarters for the area involved. Adjacent area headquarters and theater headquarters must be similarly connected.

Section IV. Water Transportation

47. INTRATHEATER SHIPPING AND INLAND WATERWAYS SERVICES. The Intratheater (or

Coastwise) Shipping Service and the Inland Waterways Service are organized in a manner similar to the Military Railway Service and the Highway Transport Service (Secs. II and III above) and both function under the theater chief of transportation. The units required by these services are normally organized from components of the transportation service organization (T/O & E 55-500) with other units attached as required.

48. CHARACTERISTICS. a. Water transportation is characterized by relative slowness, great lift capacity, and vulnerability to attack. Its normal flexibility is limited by adequate loading and unloading facilities and the extent of development work on inland waterways to make them navigable.

b. Water transportation in a theater of operations normally consists of vessels engaged in coastwise, interisland, or other intratheater shipping and of harbor craft, amphibian vehicles, and inland waterways craft allocated to, operated by, or controlled by United States Army forces on nontactical missions. Water transportation may also consist of intertheater moves by ship, the vessels being under the control of the theater chief of transportation, or only the shipments contained therein, depending on allocations and special arrangements made by the War Department and the theater commander.

c. Inland waterways transportation is effected over lakes, rivers, and canals. Barges, small

craft, tugs, and shallow draft lake and river steamers are the usual forms of transport.

d. Coastwise shipping consists of water transport operating between ports and/or anchorages in the navigable waters touching the seacoast. Coastal vessels employed in such traffic are usually smaller and of shallower draft than oceangoing vessels, but normally larger than those employed only on inland waterways.

49. OPERATIONS. a. For a description of oceangoing transport employed by the United States Army, see FM 55-105.

b. For information on small boats and amphibian trucks, see FM 55-130, and FM 55-150.

c. Both inland and coastwise waterways may be operated and maintained by civilian personnel under military supervision or by Transportation Corps small boat and harbor craft units (T/O & E 55-500). Use may be made of commercial equipment if it is available or it may be replaced or supplemented by Army boats and barges transferred from the zone of the interior, or built locally.

Section V. Other Forms of Transport

50. AIR TRANSPORTATION. Air transportation within a theater of operations, as defined here, consists of the nontactical movement of men and supplies by air. Such a theater air service is usually administered by the theater

air force, but because it is an essential means of transportation for the theater as a whole, functions under the theater chief of transportation for movement control purposes. Cargo and troop-carrier planes are normally used in this traffic.

51. NATIVE TRANSPORTATION. Native transportation in a theater of operations includes those types of transport which are native to the territory incorporated in the theater and which utilize nonmechanical vehicles or carriers. Among these forms of transportation are native craft on river and coastal waters, carts, sleds, animals, and humans (portage). Normally, it will not be necessary to organize a theater-wide native transportation service. It may, however, be desirable to organize such a service in one or more base, intermediate, or advance sections. In that event, the service is usually under the direction and control of the area transportation officer. If more than one section is involved, a native transportation division in the office of the theater chief of transportation may exercise control, or the native transport may be under the supervision of the transportation service to which it is auxiliary.

52. PIPELINE TRANSPORTATION. a. Pipeline transportation in a theater of operations consists of the movement of gasoline (petrol), oil, and lubricants (POL) by pipeline.

b. Planning, construction, maintenance, and operation of military pipelines, and supply of construction materials are functions of the Corps of Engineers.

c. Supplying of petroleum products, operating of the decanting service, and coordinating in pipeline construction are functions of the Quartermaster Corps.

d. Over-all movement control of POL products, including movement by pipeline, to feed the pipelines and to empty the terminals, and coordination in planning pipeline construction are responsibilities of the military transportation service.

CHAPTER 5

INSTALLATIONS AND ORGANIZATIONS

Section I. Ports

53. DEFINITION. a. The term "oversea ports" as used herein refers to those ports which are located in an oversea base or defense command, oversea department, or theater of operations and are under the direct jurisdiction of the commander thereof. Certain ports or subports designated by the War Department as having the same status of ports of embarkation in the continental United States are excepted.

b. The term includes the headquarters and headquarters company of the major port (oversea) (T/O & E 55-110-1), the medium port (oversea) (T/O & E 55-120-1), and the small port (oversea) which is made up of administrative and operational personnel detached from a major port (oversea) or selected from T/O & E 55-500. It also includes subports which assist a major or medium port and are staffed in a manner similar to small ports. Included in the definition are the attached operating and housekeeping units controlled, administered and supervised by the above organizations.

54. COMMAND. The commanding officer of an oversea port is known as the port commander. His duties are established in AR 55-75 and are described in greater detail in FM 55-25.

55. MISSION. The oversea port provides for the reception, debarkation, embarkation and trans-shipment of personnel, animals, supplies and equipment. Other missions may include staging of troops, re-equipment of troops, and operation of Army owned and Army chartered transport and cargo vessels, and repair ships, and other floating equipment.

56. LOCATION. The oversea port is the installation through which personnel and supplies flow from the zone of the interior and enroute from supply points in the communications zone or on the near shore to the combat areas. It may be established on friendly territory, where the instrumentalities of future campaigns are being assembled. The oversea port, likewise, may be established in newly occupied areas to facilitate supply of invading armies.

57. OPERATIONS. The oversea port is organized to perform its functions in the most expeditious and efficient manner. Under the commanding officer, who is responsible for and has authority over all activities of the port, is a competently trained staff with clearly defined duties and responsibilities. For details of operation see FM 55-25.

Section II. Depots

58. GENERAL. The basic organization for receipt, storage and issue of supplies in the Transportation Corps is the Transportation Corps depot company. (See T/O 55-260 & TE 55-260.) Such a company operates a depot designed to handle, in and out, approximately 7,000 tons of supplies per month. The depot company can operate alone at a Transportation Corps depot or with other companies to form a Transportation Corps supply section at a general depot. It may also be used as the store-keeping unit of a port (oversea), handling marine supplies, spare parts and equipment, or as a supply unit for the Military Railway Service. For small ports, rail or truck heads, where in and out tonnage approximates 2,500 tons a month, the function of a depot company may be handled by a Transportation Corps supply section. (See T/O & E 55-500.)

59. MISSION. The mission of the Transportation Corps depot is to—

- a. Requisition, receive, store and issue Transportation Corps supplies and equipment.
- b. Maintain stock record accounts.
- c. Prepare and forward status of supply reports.
- d. Report impending shortages or excesses of items stocked.
- e. Identify, classify, reclaim and salvage Transportation Corps matériel and captured enemy transportation equipment.

Section III. Staging Areas

60. FUNCTION. Staging areas in theaters of operations exist for the purpose of processing troops following debarkation and prior to assignment or in preparation for oversea movement. Staging areas may be operated by the oversea port (sec. I) or by the base section through the section transportation officer. For purposes of movement control, they are under the theater chief of transportation.

61. MISSION. The staging area is responsible for receiving troops and preparing them for movement. It inspects and checks clothing and equipment, inoculations, unit records, status of training and general fitness for assignment. It assists in preparations and arrangements for movement, acting as liaison with other services involved.

62. ORGANIZATION. The staging area complement is made up of a headquarters unit obtained from T/O & E 55-500 and the necessary number of staging area companies (T/O & E 55-147), together with personnel in support, attached or assigned from other services to provide the proper technical and operating facilities.

Section IV. Table of Organization Units

63. GENERAL. The military transportation service in theaters of operations has a number of

separate Tables of Organization units to provide technical assistance for the performance of its mission. These tables are constructed to provide the greatest possible flexibility in meeting the theater transportation requirements, and to fit any installation without wastage of manpower. These organizations, together with other Transportation Corps personnel secured through allotment, are supplemented by attached or assigned personnel as required.

64. T/O UNITS. Following is a list and a brief description of Transportation Corps Tables of Organization:

a. Amphibian Truck Company (T/O & E 55-37): The primary function of this company is to transfer cargo from shipside to beach dumps in those installations where docking facilities are nonexistent or inadequate, or in landing operations on hostile shores. The company is designed and equipped to move 600 to 800 tons of cargo per 24-hour period, dependent upon the operating conditions. The company may also be used to load vessels at ports of debarkation and is often used in transferring personnel from ship to shore and shore to ship. For a detailed description of its operation, see FM 55-150.

b. Army Marine Ship Repair Company (T/O & E 55-47): This is a mobile maintenance and repair unit capable of traveling from installation to installation in a theater to perform third

and minor fourth echelon maintenance and repairs to small boats, harbor craft, floating equipment, and in some cases repairs to larger vessels. The company is equipped with an especially converted ship or barge, fully equipped with machine, electric, engine, wood-working, rigging and paint shops.

c. Headquarters and Headquarters Company, Major Port (oversea) (T/O & E 55-110-1): Headquarters and administrative overhead for an oversea port capable of handling 300,000 tons of cargo and 50,000 troops per month is provided in this table.

d. Headquarters and Headquarters Company, Medium Port (oversea) (T/O & E 55-120-1): This Table of Organization provides the headquarters and administrative overhead for a medium size port which can handle 150,000 tons of supplies and 25,000 troops per month.

e. Headquarters and Headquarters Detachment, Port Battalion (T/C & E 55-116): This is a headquarters unit intended for port battalions, operating separately or in an isolated location, when authorized by the War Department. It is capable of controlling six port companies in the performance of their loading and unloading operations. (See TM 55-310.)

f. Port Company (T/O & E 55-117): This unit provides supervisory personnel and labor trained in the loading and unloading of cargo vessels at ports, beachheads, or off-shore an-

chorage. It contains personnel for the maintenance of dock equipment and repair of broken boxes and crates. Under favorable conditions, the unit is capable of unloading 150 long tons per hour, or 15 long tons per hour, per hatch gang. (See TM 55-310.)

g. Staging Area Company (T/O & E 55-147): This company provides messing facilities at ports of embarkation or debarkation. Each company is designed and equipped to feed approximately 1,000 individuals per meal.

h. Headquarters and Headquarters Company, Military Railway Service (T/O & E 55-302): This unit controls and supervises railroad operations and maintenance in a theater of operations or a major geographical subdivision thereof. (See FM 55-50.)

i. Headquarters and Headquarters Company, Railway Grand Division (T/O & E 55-202): This unit serves as a supervisory headquarters for from two to six operating battalions and from one to two shop battalions. (See FM 55-50.)

j. Railway Operating Battalion (T/O & E 55-225): This organization is adequate to operate and maintain from 90 to 150 miles of steam railroad. A railway operating battalion normally consists of a headquarters and headquarters company, maintenance of way company, maintenance of equipment company (excluding Diesel and electric sections) and transportation company. (See FM 55-55.)

(1) Headquarters and Headquarters Company, Railway Operating Battalion (T/O & E 55-226): This company performs billeting, messing, and supply functions for the railway operating battalions. It also contains the train dispatcher's office.

(2) Maintenance of Way Company, Railway Operating Battalion (Company "A", T/O & E 55-227): This company performs track, bridge, building, and signal maintenance incident to the maintenance of the right-of-way and appurtenant structures. When authorized by the War Department, extra track and/or bridge platoons may be added to increase the capacity of the company.

(3) Maintenance of Equipment Company, Railway Operating Battalion (Company "B", T/O & E 55-228): This company is capable of making running repairs to approximately 30 steam locomotives and 600 cars. When Diesel and/or electric motive power is involved, the War Department may authorize the activation of the Diesel and/or electric sections of this company to provide adequate maintenance of this equipment. The maintenance of steam motive power does not require the Diesel or electric section.

(4) Transportation Company, Railway Operating Battalion (Company "C", T/O & E 55-229): This company provides sufficient train crews for a maximum operation of 40 trains per day.

(5) Electric Power Transmission Company, Railway Operating Battalion (Company "D", T/O & E 55-217): This company is capable of maintaining electric power transmission on approximately 200 miles of electrified railway. This company is not normally a basic part of the railway operating battalion and is activated only when authorized by the War Department

k. Railway Shop Battalion (T/O & E 55-235): This unit is adequate to make classified repairs for the power rolling stock of four railway operating battalions. A railway shop battalion normally consists of a headquarters and headquarters company, erecting and machine shop company (excluding Diesel-electric platoon), boiler and smith shop company and car repair company. (See FM 55-60.)

(1) Headquarters and Headquarters Company, Railway Shop Battalion (T/O & E 55-236): This company performs administrative billeting, messing, and supply functions for the railway shop battalion. It is also responsible for plant and tool maintenance.

(2) Erecting and Machine Shop Company, Railway Shop Battalion (Company "A", T/O & E 55-237): This company repairs and maintains locomotives. Part, or all, of the Diesel-electric platoon is activated when Diesel and/or electric motive power is involved, and when authorized by the War Department.

(3) Boiler and Smith Shop Company, Railway Shop Battalion (Company "B", T/O & E 55-238): This company performs boiler and

blacksmith repairs necessary to locomotives and cars.

(4) Car Repair Company, Railway Shop Battalion (Company "C", T/O & E 55-239): This company makes repairs to freight and passenger car equipment.

l. Base Depot Company (T/O 55-260 & TE 55-260): This company receives, stores, and issues Transportation Corps supplies and equipment. It furnishes administrative and technical units for the operation of Transportation Corps depots in the theaters of operations. It may inspect and assign for repair, or salvage, Transportation Corps and captured enemy equipment.

m. Headquarters and Headquarters Company, Highway Transport Service (T/O & E 55-402T): This organization provides administrative, planning and supervisory personnel for coordination, direction and operational control of a highway transport service; can contract for civilian vehicles and labor as supplements to military vehicles and operators.

n. Transportation Corps Service Organization (T/O & E 55-500):

(1) This is a composite table which includes 60 types of units, varying in size and function. These units are designed for the following purposes:

(a) To supplement T/O single purpose organizations, where additional trained technicians are necessary in quantities less than the T/O organizational strength.

(b) To perform single purpose technical

functions as part of a large organization where the need for such activity is less than a single-purpose T/O company or other organization performs.

(c) To construct a composite unit made up either for a single purpose where no T/O organizational unit is provided or where a number of small units of variously trained technicians are required for the functioning of a relatively small over-all installation.

(2) T/O & E 55-500 is divided into the following parts: Headquarters and mess units; maintenance and repair units (marine and rail); port stevedore units; amphibian truck units; supply units; traffic regulation units; crews, boats and harbor craft; and crews, propulsion units, cranes and barges. This table is the only source for obtaining marine maintenance and repair units for shore installations, traffic regulation personnel, crews for small boats and harbor craft, hospital train maintenance units and railway workshop (mobile) units. Reference is made to appropriate Field Manuals of the 55- series.

APPENDIX

REFERENCES

Following is a list of War Department publications which pertain to the military transportation service in various ways. Additional publications which may be of interest to readers of the manual are listed in FM 21-6, List and Index of War Department Publications.

Field Manuals

- 5-10, Construction and Routes of Communication.
- 9-5, Ordnance Service In the Field.
- 10-10, Quartermaster Service In Theaters of Operations.
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